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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,304	12/28/2001	Jonathan A. Ellman	045413/0110	3985

22428 7590 03/25/2004

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EXAMINER

BAKER, MAURIE GARCIA

ART UNIT	PAPER NUMBER
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1639

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,304

Applicant(s)

ELLMAN ET AL.

Examiner

Maurie G. Baker

Art Unit

1639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-37 and 53-59 is/are pending in the application.
- 4a) Of the above claim(s) 35-37, 55-57 and 59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34, 53, 54 and 58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04052002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The Preliminary Amendment of September 12, 2003 is noted. Claims 34-37 and 53-59 are currently pending.

Election/Restriction

2. This application contains claims directed to patentably distinct species of the claimed invention. Election is required as follows. The species election requirement requires that the separate moieties making up the claimed library compounds be set forth with specificity as described below.

The species of library compounds must be elected from the following:

- (1) The CTBF portion should be elected with at least an indication of the class of compounds that this moiety represents
- (2) R⁸ should also be specifically elected (in claims 53-59)

The species are distinct, each from the other, because their structures and modes of action are different. They would also differ in their reactivity and the starting materials from which they are made. Therefore, the species have different issues regarding patentability and represent patentably distinct subject matter. The different species would require different searches, thus creating an undue search burden.

3. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

4. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and *a listing of all claims readable thereon*, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

5. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

6. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

9. During a personal interview held with Matthew Mulkeen and Mike Kaminski on February 17, 2004, the examiner noted that an election of species would be required in the instant case. In a telephone conversation on the same day, a provisional election was made without traverse to prosecute the species of R⁸ of claim 58 and CTBF of phenyls as denoted in Figure 4 of the instant application. Affirmation of this election must be made by applicant in replying to this Office action.

10. Therefore, claims 35-37, 55-57 and 59 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected species, there being no allowable generic claim.

11. Claims 34, 53, 54 and 58 are under examination in this action.

12. Applicant's specifically elected species (i.e. species of R⁸ of claim 58 and CTBF of phenyls as denoted in Figure 4 of the instant application) was searched and was not found in the

prior art. Thus, the search was expanded to non-elected species which *were* found in the prior art, see rejection below. Also, see MPEP § 803.02 (emphasis added):

On the other hand, should no prior art be found that anticipates or renders obvious the elected species, the search of the Markush-type claim will be extended. If prior art is then found that anticipates or renders obvious the Markush-type claim with respect to a nonelected species, the Markush-type claim shall be rejected and claims to the nonelected species held withdrawn from further consideration. ***The prior art search, however, will not be extended unnecessarily to cover all nonelected species.*** Should applicant, in response to this rejection of the Markush-type claim, overcome the rejection, as by amending the Markush-type claim to exclude the species anticipated or rendered obvious by the prior art, the amended Markush-type claim will be reexamined. The prior art search will be extended to the extent necessary to determine patentability of the Markush-type claim. In the event prior art is found during the reexamination that anticipates or renders obvious the amended Markush-type claim, the claim will be rejected and the action made final. Amendments submitted after the final rejection further restricting the scope of the claim may be denied entry.

Claim Rejections - 35 USC § 112

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 53, 54 and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims recite the term CTBF; however this term is not defined in the claim.

This creates confusion. It is suggested to add the definition of the acronym to the claim.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 34, 53, 54 and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Fischli et al (US 4,766,133) in light of Janda (PNAS, Vol. 91, pp. 10779-10785).

Fischli et al discloses disulfide compounds that read directly on the compounds of the claimed library. See compounds of Abstract when $A = -SR^9$. Specifically, the (benzimidazol-2-yl)-pyridinium portion of the molecules of the reference reads on the CTBF portion of the instant claims. The reference specifically discloses a number of compounds that have portions that read on the R^8 group in instant claim 58 (and thus on the more generic claims of 34, 53 and 54) when $A = -SR^9$ and R^9 = straight chain alkyl substituted with amine. See, e.g. compound G in column 12. The examiner has also attached a printout of relevant compounds from the STN record for the reference.

Applicant claims a "library" of compounds; however, the term is used quite broadly in the art to mean "any ensemble of molecules" (See Janda, middle column pg. 10779). As there is no specific definition of a library in applicants specification, any ensemble of molecules that reads on those set forth in the claims is deemed to be a library. As the compounds of Fischli et al clearly read on those claimed as set forth *supra*, the reference is deemed to disclose a "library".

17. Claims 34, 53, 54 and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Roques et al (US 5,491,169) in light of Janda (PNAS, Vol. 91, pp. 10779-10785).

Roques et al discloses disulfide compounds that read directly on the compounds of the claimed library (see Abstract). The portion of the molecules of the reference containing the A-B-Z moiety reads on the CTBF portion of the instant claims. The reference specifically discloses a number of compounds that have portions that read on the R⁸ group in instant claim 58 (and thus on the more generic claims of 34, 53 and 54). See, for example, compounds of Table 1 of the reference.


Applicant claims a "library" of compounds; however, the term is used quite broadly in the art to mean "any ensemble of molecules" (See Janda, middle column pg. 10779). As there is no specific definition of a library in applicants specification, any ensemble of molecules that reads on those set forth in the claims is deemed to be a library. As the compounds of Roques et al clearly read on those claimed as set forth *supra*, the reference is deemed to disclose a "library".

Conclusion

18. No claims are allowed.
19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurie Garcia Baker, Ph.D. whose telephone number is (571) 272-0805. The examiner is on an increased flextime schedule; the best time to contact the examiner is Monday-Friday from 6:00-10:00 a.m.

20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Wang, can be reached at (571) 272-0811. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Maurie Garcia Baker, Ph.D.
March 23, 2004



MAURIE GARCIA BAKER PH.D
PRIMARY EXAMINER